

REMARKS

Reconsideration of the Office action mailed on July 15, 2004 in connection with the above-identified patent application is requested in view of the foregoing amendments and the following remarks.

Double Patenting

The Examiner made several double patenting rejections, each of which is addressed below. References to claims from co-pending applications in the following discussion refer to claims as amended.

1. Application Number 10/052,274.

The Examiner provisionally rejected claims 1-4, 7 and 9 under the judicially created doctrine of obviousness-type double patenting in light of claims 1-20 from co-pending application number 10/052,274. That rejection is traversed. Applicant points out that claims 1-3, 10-14 and 17-20 from the co-pending application have been canceled, so the rejection based on those claims is moot. There remains the rejection based on co-pending claims 4-9, 15 and 16.

The cited claims from the present application differ from co-pending claims 4-9, 15 and 16 in that the co-pending claims address later-developed species of the invention. In other words, the present application includes what may be thought of as genus claims while the co-pending application includes later-developed species claims. The cited claims of the present application address woodworking machines that include, among other things, a detection system to detect contact between a person and a cutting tool, and a reaction system configured to stop movement of the cutting tool into a cutting zone or to interrupt the translational movement of a cutter. The cited claims from

the co-pending application define specific, later-invented embodiments that require first and second braking elements configured to engage both a cutting tool and base, or first and second braking elements with a biasing mechanism, as described in the claims.

The cited claims in the present application are not obvious in light of the cited co-pending claims because the invention recited in the co-pending claims did not exist at the time the invention recited in the present claims was made or at the time the present application was filed. See 35 USC 103 (subject matter must be obvious "at the time the invention was made"). Applicant could not have filed the claims together in one application, and the inventive entities in the two applications are different. Thus, the present claims should not be rejected based on obviousness-type double patenting. It may be that the cited claims in the present application encompass the cited co-pending claims. However, that fact by itself is insufficient to support a double patenting rejection. The issues of claim dominance and double patenting must not be confused. MPEP 804 II at 800-20.

Also, a two-way obviousness analysis should be applied for this rejection because applicant could not have filed the claims in a single application and because the invention of the present application was made well prior to the invention of the co-pending application. MPEP 804 B.1.(b) and In re Berg, 46 USPQ2d 1226 (Fed. Cir. 1998). If a two-way analysis is made, then there is no obviousness because of differences between the genus and species claims. For all of these reasons, this double patenting rejection should be withdrawn.

2. Application Number 09/955,418.

The Examiner provisionally rejected claims 1, 4 and 7 under the judicially created doctrine of obviousness-type double patenting in light of claims 1-20 from co-pending application number 09/955,418. That rejection is traversed. Applicant points out that claims 2-8, 13 and 20 from the co-pending application have been canceled, so the rejection based on those claims is moot. There remains the rejection based on co-pending claims 1, 9-12 and 14-19.

As with the first double-patenting rejection discussed above, the cited claims from the present application are genus claims while claims 1, 9-12 and 14-19 from the co-pending application are later-developed species claims. The cited claims in the present application address woodworking machines with detection systems and reaction systems as described. The cited co-pending claims define later-invented up-cut chop saws having limitations specific to those saws. Applicant could not have filed those claims together in one application because the up-cut chop saws did not exist at the time the invention of the present application was made. Additionally, the inventive entities in the two applications are different. Thus, the claims in the present application are not obvious in light of the cited co-pending claims. See 35 USC 103 (subject matter must be obvious "at the time the invention was made").

Again, it may be that the cited claims in the present application encompass the cited co-pending claims, but that fact is insufficient to support a double patenting rejection. The issues of claim dominance and double patenting must not be confused. MPEP 804 II at 800-20. Also, if the cited application is allowed to issue first in order to maintain the double patenting rejection in this application, then a two-way obviousness

analysis must be made for the same reasons given above, and if a two-way analysis is made, then there is no obviousness because of differences between the claims. MPEP 804 B.1.(b) and In re Berg, 46 USPQ2d 1226 (Fed. Cir. 1998).

3. Application Number 09/929,238.

The Examiner provisionally rejected claims 1- 4, 7 and 9 under the judicially created doctrine of obviousness-type double patenting in light of claims 1-29 from co-pending application number 09/929,238. That rejection is traversed. Nevertheless, concurrently with the filing of this amendment, applicant is canceling without prejudice claims 1-8 and 10-29 from the co-pending application, so the rejection based on those claims is moot. There remains the rejection based on co-pending claim 9. However, co-pending claim 9 is directed to a miter saw with a rotatable blade and a brake mechanism adapted to stop rotation of the blade; that claim does not address stopping movement of a cutting tool into a cutting zone or interrupting translational movement of a cutter as described in the cited claims of the present application. Therefore, there is no double patenting issue between co-pending claim 9 and the cited claims in the present application.

4. Application Number 10/052,273.

The Examiner provisionally rejected claims 1- 4, 7 and 9 under the judicially created doctrine of obviousness-type double patenting in light of claims 1-15 from co-pending application number 10/052,273. That rejection is traversed. Applicant points out that claims 1-4 from the co-pending application have been canceled, so the rejection based on those claims is moot. There remains the rejection based on co-pending claims 5-24, but all of those claims are for miter saws with reaction systems or reaction means

that urge a pivot arm away from a base. Those claims do not address a reaction system adapted to stop motion of the cutting tool into the cutting zone or interrupt the translational movement of a cutter, as set forth in the cited claims of the present application. Clearly, "urging away" is different from "stopping" or "interrupting" because a force may urge a moving body away without being sufficiently strong to stop or interrupt the movement of that body. Therefore, the co-pending claims 5-24 have a different focus, and there is no double patenting issue between those co-pending claims and the cited claims in the present application.

5. Application Number 10/050,085.

The Examiner provisionally rejected claims 1- 4, 7 and 9 under the judicially created doctrine of obviousness-type double patenting in light of claims 1-20 from co-pending application number 10/050,085. That rejection is traversed. Applicant points out that claims 1-11, 14 and 17-20 from the co-pending application have been canceled, so the rejection based on those claims is moot. There remains the rejection based on co-pending claims 12, 13, 15 and 16. Those co-pending claims address miter saws that include a brake member configured to engage and stop the blade from spinning in the event a dangerous condition is detected. They do not address a reaction system adapted to stop motion of the cutting tool into the cutting zone or interrupt the translational movement of a cutter, as set forth in the cited claims of the present application. Therefore, there is no double patenting issue between the co-pending claims and the cited claims in the present application.

6. Application Number 10/052,806.

The Examiner provisionally rejected claims 1, 4 and 7 under the judicially created doctrine of obviousness-type double patenting in light of claims 1-18 from co-pending application number 10/052,806. That rejection is traversed. Applicant points out that claims 1-5 and 16-18 from the co-pending application have been canceled, so the rejection based on those claims is moot. There remains the rejection based on co-pending claims 6-15.

As with the first double-patenting rejection discussed above, the cited claims from the present application are genus claims while the cited claims from the co-pending application are later-developed species claims. The cited co-pending claims define later-invented miter saws having specific reaction systems and reaction means. Applicant could not have filed those claims together in one application because the specific reaction systems and reaction means did not exist at the time the invention of the present application was made. Additionally, the inventive entities in the two applications are different. Thus, the claims in the present application are not obvious in light of the cited co-pending claims. See 35 USC 103 (subject matter must be obvious "at the time the invention was made").

Again, it may be that the cited claims in the present application encompass or cover the cited co-pending claims, but that fact is insufficient to support a double patenting rejection. The issues of claim dominance and double patenting must not be confused. MPEP 804 II at 800-20. Also, a two-way obviousness analysis should be applied for this rejection because applicant could not have filed the claims in a single application and because the invention of the present application was made well prior to

the invention of the co-pending application. MPEP 804 B.1.(b) and In re Berg, 46 USPQ2d 1226 (Fed. Cir. 1998).

7. Application Number 10/100,211.

The Examiner provisionally rejected claims 1-4, 7 and 9 under the judicially created doctrine of obviousness-type double patenting in light of claims 1-10 from co-pending application number 10/100,211. That rejection is traversed. Applicant points out that claims 2-10 from the co-pending application have been canceled, so the rejection based on those claims is moot. There remains the rejection based on co-pending claim 1. That co-pending claim, however, has been amended so that it now addresses a machine with a brake mechanism adapted to stop a motion of a cutting tool within 10 milliseconds after detection of an unsafe condition, which is different from the cited claims of the present application. Therefore, there is no double patenting issue between the co-pending claim and the cited claims in the present application.

Claim Rejections – 35 USC §103

The Examiner rejected claims 1-4, 7 and 9 under 35 U.S.C. §103(a) as being unpatentable over Gaines (U.S. Patent No. 5,052,255) in view of Lokey (U.S. Patent No. 3,785,230) or Friemann et al. (U.S. Patent No. 3,858,095). That rejection is traversed.

Gaines discloses a speed brake for a radial arm saw. Specifically, Gaines shows mechanisms to stop the movement of a blade toward a user when the blade "moves faster than the predetermined safe speed." (Gaines, column 3, lines 59-60.) Those mechanisms are either a hydraulic cylinder with leaf springs that limit the flow of hydraulic fluid in the cylinder when the cylinder accelerates too fast (Gaines, column 4),

or a mechanical system that includes centrifugally driven locking members that move outward due to centrifugal force when the blade accelerates toward a user faster than expected (Gaines, column 5, lines 19-25, column 6, lines 8-10 and 50-56). Lokey discloses a system said to detect dangerous proximity between a person and a saw blade, and Friemann discloses a system said to detect contact between a person and a band saw blade. The Examiner says it would have been obvious to modify the device of Gaines to use the detection systems of Lokey or Friemann to "stop motion of the cutting tool into the cutting zone when contact between the user and the tool is detected in order to prevent further and serious injury to the user." (Office Action, 5.)

Applicant previously pointed out that the combination suggested by the Examiner would not work because the brakes disclosed by Gaines are all actuated by acceleration, they could not be actuated by contact between a person and the blade. The Examiner, however, said:

In this case, Gaines is only being used to disclose that it is old and well known in the art to stop the movement of a cutting tool into a cutting zone when a [sic] unsafe condition is created or forms. Therefore, it is irrelevant whether or not Gaines discloses an unsafe condition of contact between the user and tool. Lokey and Friemann are used to disclose it is old and well [sic] in the art to stop movement of blades upon contact of a user and the cutting tool. Therefore, one of ordinary skill in the art would readily recognize the combination and modification with Gaines such that the tool of Gaines also stop when another unsafe condition occurred, namely, contact between the user and the blade. (Office Action, 6-7.)

The Examiner's conclusion, however, ignores the requirement that there must be a reasonable expectation that the suggested combination will succeed. MPEP 2143 & 2143.02. In the case at hand, it is clear that the only way to actuate the brakes disclosed in Gaines is by acceleration of the housing and blade. There simply is no way

to actuate those brakes based on contact between a person and the blade. Contact between a user and the blade will not flex the leaf springs to limit the flow of hydraulic fluid in one of Gaines' brakes, nor will contact create a centrifugal force to move the locking members outward in the other brake disclosed by Gaines. Given that those brakes cannot be actuated by contact, there is no reasonable expectation that the detection systems of Lokey or Friemann could be successfully combined with the saw disclosed in Gaines to arrive at applicant's claimed invention. Therefore, that combination cannot support a conclusion of obviousness.¹

The Examiner's conclusion also ignores the requirement that the reasonable expectation of success must be "found in the prior art, not in applicant's disclosure." MPEP 2143 (quoting *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)). There is nothing in the cited references to suggest that the combination of Gaines with Lokey or Friemann would work. To the contrary, the Gaines disclosure shows that its brakes will not work with proximity or contact detection systems, and the disclosures of Lokey and Friemann both fail to address whether their systems will work with a machine such as disclosed in Gaines.

There must also be some suggestion or motivation to combine Gaines with Lokey or Friemann, either in the cited references themselves or in the general knowledge available to one of ordinary skill in the art. MPEP 2143. The only such suggestion identified by the Examiner is "to prevent further and serious injury to the

¹ Another reason why the combination of Gaines and Lokey cannot support a conclusion of obviousness is because Lokey fails to show or suggest any detection system capable of detecting contact between a person and a blade. Instead, Lokey discloses a system said to detect proximity between a person and a blade.

user." (Office Action, 5.) In other words, the Examiner says a person of ordinary skill would know to make the combination because contact between a user and the blade is an unsafe condition, just as accelerating the blade too quickly was identified as an unsafe condition in Gaines. (Office Action, 7.) But that conclusion requires a significant leap of thought. Why would a person of ordinary skill think that he or she could alleviate the unsafe condition of contacting the blade just because Gaines teaches how to address the unsafe condition of a blade that is accelerating too quickly toward a user? Where is the common ground between those unsafe conditions that would cause one to conclude that the solution to one situation would apply to the other? Applicant asserts that there is no such suggestion or teaching in the prior art. In fact, the unsafe condition of contacting the blade is fundamentally different from the unsafe condition described by Gaines. When a person contacts a spinning blade, some action must be taken very fast in order to minimize any injury - on the order of milliseconds. When a blade is accelerating toward a user, much more time is available to react. That difference is fundamental to how one can address the problem. Because of that fundamental difference, it is highly unlikely that a person of ordinary skill would think that the solution taught by Gaines could apply to the unsafe condition of contacting the blade.

There also has been a long-felt need for saws to address the problem of contact between a person and the blade, but no one has combined the teachings of Gaines, Lokey and Friemann to solve that problem despite the fact that the disclosure of Gaines has been known for over 10 years and the disclosures of Lokey and Friemann have been known for over 30 years. This fact further supports the conclusion that there is no motivation or suggestion to combine Gaines with Lokey or Friemann.

For all these reasons, applicant asserts that claims 1-4, 7 and 9 are not obvious and the rejection of those claims under 35 USC 103(c) should be withdrawn.

Withdrawn Claims

Applicant requests that withdrawn claims 5, 6 and 8 be reinstated because they depend from allowable claims.

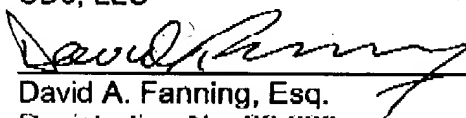
New Claims

Applicant is adding new claims 17-28. Those claims distinguish the cited references and should be allowable.

For the reasons given above, applicant believes the application is in a condition for allowance and applicant requests that it proceed to issuance. Please call the undersigned with any questions.

Respectfully submitted,

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Date: October 12, 2004

David A. Fanning